

ELECTROMAGNETIC WAVE ABSORBING THERMALLY CONDUCTIVE COMPOSITION AND SHEET THEREOF

ABSTRACT

An electromagnetic wave absorbing thermally conductive composition contains a matrix resin component, metal soft magnetic particles, and thermally conductive particles. The metal soft magnetic particles are carbonyl iron particles and are present in an amount of 30% by volume or more when the electromagnetic wave absorbing thermally conductive composition is a population parameter. A value of an imaginary part (μ'') of relative permeability of the electromagnetic wave absorbing thermally conductive composition is 0.9 or more in at least some bands in a frequency range of 18 to 26.5 GHz. The electromagnetic wave absorbing thermally conductive composition in the form of a sheet has a thermal conductivity of 2.0 W/m·K or more in the thickness direction. A sheet of the present invention includes the above composition in the form of a sheet. Thus, the present invention provides the electromagnetic wave absorbing thermally conductive composition and its sheet that can increase the value of the imaginary part (μ'') of relative permeability in a frequency band of 18 to 26.5 GHz, efficiently absorb electromagnetic wave noise in this frequency band, and also have a high thermal conductivity.

Fig. 1